

**ALTERNATIVE MULE DEER**

**MANAGEMENT PLAN**

**FOR**

**GAME MANAGEMENT UNITS**

**12A, 12B, 13A, 13B, 36B, 45A, 45B, and 45C**

Arizona Game and Fish Department

November 8, 2004

## INTRODUCTION

In 1995, the Arizona Game and Fish Department developed their *Wildlife 2000* Strategic Plan. Through this document, the Arizona Game and Fish Commission directed the Department to manage Game Management Units 12A, 12B, 13A, 13B, 36B, 45A, 45B, and 45C for ". . . buck hunting opportunities that emphasize harvest of older age class animals, reduced hunter densities, and higher hunt success." This management emphasis was reaffirmed in January 2001 with the approval and adoption of the *Wildlife 2006* Strategic Plan.

This operational plan describes how the Department will meet these objectives. This plan will be reviewed and revised, if needed, when the Strategic Plan is updated. Annual edits have been made since 1996 to reflect Commission actions.

## MANAGEMENT OBJECTIVES

1. Manage for a harvest consisting of mature bucks (3+ years old) in the following percentages:
  - 30-45% in 36B
  - 45-65% in 45A, 45B, and 45C
  - 55-75% in 12A and 12 B
  - 65-80% in 13A and 13B

In addition, manage for a harvest consisting of older mature bucks (5+ years old) in the following percentages:

- 20-30% in 12A and 12B
- 45-55% in 13A and 13B

2. Manage for a ratio of at least 20 bucks per 100 does during the post-hunt surveys.
3. Manage for a hunt success of:
  - 20-30% in 45A, 45B, and 45C
  - 25-35% in 36B
  - 50-70% in 12A, 12B, 13A, and 13B
4. Manage for an average hunter density not to exceed 0.5 hunters per square mile during the General Seasons in 13A, 13B, 36B, 45A, 45B, and 45C, and during the late General Season in 12A and 12B.
5. Evaluate permit adjustments in Unit 12A when fawn:doe ratios are less than 60:100.
6. Manage deer populations to avoid adverse impacts to the habitat.

## **MONITORING**

To meet Objective 1: Use hunter check stations (Units 12A and 36B), field checks of hunters during the hunts (all units), and collection of incisors from harvested deer (Units 12A, 12B, 13A, 13B, 45A, 45B, and 45C) to provide age structure and other biological data.

To meet Objective 2: Conduct standard post-hunt surveys in accordance with Species Management Guidelines.

To meet Objectives 3 and 4: Use the hunter questionnaire program to estimate hunt success and hunter density.

To meet Objective 5: Conduct standard post-hunt surveys in accordance with Species Management Guidelines.

To meet Objective 6: Forage use by ungulates will be monitored, where appropriate, to assess the population level in relation to the carrying capacity of the habitat. Monitoring will be conducted as follows:

1. In 12A, 12B, 13A, and 13B, establish browse transects in key winter range areas. Monitor browse use of current year's growth in early March. If browse use exceeds 50%, coordinate with the responsible land management agency to determine: (a) if overall use is acceptable to maintain browse health; (b) whether excess use is attributed to wildlife, livestock, or both; and (c) whether deer population reduction is needed.
2. In 12A use yearling buck weights as a measure of summer range conditions. If yearling buck weights average less than 90 pounds, coordinate with the U.S. Forest Service to assess if summer grazing is excessive and whether deer and livestock numbers should be evaluated.

## **HUNT STRUCTURE**

### **12A, 12B, 13A, and 13B**

Archery: An archery season may be offered each year. An early (August 23 – September 5) any antlered deer season would occur in Units 12A, 12B, and 13A.

Juniors - Only and Muzzleloader: A muzzleloader season may be offered each year in either Unit 12AE or 12B. Due to public input no juniors-only antlered deer seasons will be offered in a unit north of the Colorado River. A juniors-only antlerless season for 12A West will be offered.

General Season: Offer both an early and late general season in 12A and 12B. The early hunts will be used to maintain population objectives and buck:doe ratios. The late hunts will be used to provide a high quality hunt experience. In Units 13A and 13B, current low deer populations do not require an early hunt to manage overall population levels. The single general season is intended to meet the late hunt quality hunt objectives.

To address land management agency concerns about road damage, reduce human safety concerns from potential hazardous storms, and reduce stress on the deer herd as they concentrate on winter range, the late hunts will start on the next to last Friday in November and continue for 10 days.

### **36B**

Archery: Maintain non-permitted seasons both preceding and following the general season. The archery season following the general season should be for "any antlered deer."

General Season: Offer both an early and late general season hunt.

### **45A, 45B, and 45C**

Archery: An archery hunt will be held starting January 1, after bighorn sheep and juniors-only hunts are complete.

Juniors-Only: A juniors-only hunt may be considered with a limited number of permits. This hunt should be timed to minimize conflicts with bighorn sheep hunters.

General Season: A single general firearms hunt should be held in early November. October weather is generally too warm and a late November or December hunt would conflict with bighorn sheep transplants and hunts. Multiple (stratified) general firearms hunts should not be considered, as they would conflict with the Refuge management objectives.

## **ALTERNATIVE MANAGEMENT GUIDELINES**

### **12A, 12B, 13A, and 13B**

Early General Season, Juniors-Only, and Muzzleloader: A decrease in permits is indicated when buck:doe ratios are below 20:100 and an increase in permits is indicated when buck:doe ratios exceed 30:100.

Late General Season: A decrease in permits is indicated when less than 45% of the late season harvest is 3+ years old and hunt success is less than 50%. An increase in permits is indicated when more than 65% of the late season harvest is 3+ years old and hunt success exceeds 70%.

Antlerless: Antlerless hunts should be considered when browse use on winter range by deer has exceeded 50% before mid-March. In Unit 12A, antlerless hunts may be considered if yearling buck weights drop below an average of 90 pounds.

### **36B**

General Season: A decrease in permits is indicated when buck:doe ratios are below 20:100, when less than 30% of the late season harvest is 3+ years old, and/or when hunt success is less than 25%. An increase in permits is indicated when buck:doe ratios exceed 30:100, when more than 45% of the late season harvest is 3+ years old, and/or when hunt success exceeds 35%.

Antlerless: Antlerless hunts will be considered if yearling buck weights drop below historical levels. All available biological data will be used to determine whether a population reduction is warranted.

### **45A, 45B, and 45C**

General Season: A decrease in permits is indicated when buck:doe ratios are below 25:100, when less than 45% of harvested bucks are 3+ years old, and/or when hunt success is less than 20%. An increase in permits is indicated when buck:doe ratios exceed 35:100, when more than 65% of the harvested bucks are 3+ years old, and/or when hunt success exceeds 30%. Coordinate harvest strategies with the U.S. Fish and Wildlife Service.